

OIPE

RAW SEQUENCE LISTING DATE: 06/21/2001 PATENT APPLICATION: US/09/873,546 TIME: 17:30:08

Input Set : A:\05080-1.txt

Output Set: N:\CRF3\06212001\1873546.raw

ENTERED

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3 <110> APPLICANT: Clark, Geoff
              Ellis, Chad
              Vos, Michelle
      7 <120> TITLE OF INVENTION: Rig: Novel Ras-Related Gene
      9 <130> FILE REFERENCE: NIH-05080
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/873,546
C--> 11 <141> CURRENT FILING DATE: 2001-06-04
     11 <160> NUMBER OF SEQ ID NOS: 15
     13 <170> SOFTWARE: PatentIn version 3.0
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     17 <212> TYPE: PRT
     18 <213> ORGANISM: Artificial Sequence
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     25 <222> LOCATION: (4)..(4)
     26 <223> OTHER INFORMATION: Xaa at this position can be any amino acid.
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→ 31 Cys Ala Ala Xaa

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    66 agetegetgg tgetgegett egtgaaggge aegtteegeg acacetaeat ecceaecate
                                                                               120
     68 gaggacacct accggcaggt gatcagctgc gacaagagcg tgtgcacgct gcagatcaca
                                                                               180
    70 gacaccaccg gcagccacca gttcccggcc atgcagcgcc tgtccatctc caagggccac
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72 gccttcatcc tggtgttctc cgtcaccagc aagcagtcgc tggaggagct ggggcccatc	300												
4 tacaagetea tegtgeagat caagggeage gtggaggaea teecegtgat getegtggge													
'6 aacaagtgeg atgagaegea gegggaggtg gaeaegegeg aggegeagge ggtggeecaa													
78 gagtggaagt gegettteat ggagaeeteg geeaagatga aetacaaegt caaggagete													
30 ttccaggage tgctgacget ggagacgege eggaacatga geetcaacat egaeggeaag													
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93 1 5 10 15													
95 Gly Val Gly Lys Ser Ser Leu Val Leu Arg Phe Val Lys Gly Thr Phe													
96 20 25 30													
98 Arg Asp Thr Tyr Ile Pro Thr Ile Glu Asp Thr Tyr Arg Gln Val Ile													
99 35 40 45													
101 Ser Cys Asp Lys Ser Val Cys Thr Leu Gln Ile Thr Asp Thr Thr Gly 102 50 55 60													
102 50 55 60 104 Ser His Gln Phe Pro Ala Met Gln Arg Leu Ser Ile Ser Lys Gly His													
104 Set his Gill the Flo Ala Met Gill Alg hed Set lie Set hys Gly his 105 65 70 75 80													
107 Ala Phe Ile Leu Val Phe Ser Val Thr Ser Lys Gln Ser Leu Glu Glu													
108 85 90 95													
110 Leu Gly Pro Ile Tyr Lys Leu Ile Val Gln Ile Lys Gly Ser Val Glu													
111 100 105 110													
113 Asp Ile Pro Val Met Leu Val Gly Asn Lys Cys Asp Glu Thr Gln Arg													
114 115 120 125													
116 Glu Val Asp Thr Arg Glu Ala Gln Ala Val Ala Gln Glu Trp Lys Cys													
117 130 135 140													
119 Ala Phe Met Glu Thr Ser Ala Lys Met Asn Tyr Asn Val Lys Glu Leu													
120 145 150 155 160													
122 Phe Gln Glu Leu Leu Thr Leu Glu Thr Arg Arg Asn Met Ser Leu Asn													
123 165 170 175													
125 Ile Asp Gly Lys Arg Ser Gly Lys Gln Lys Arg Thr Asp Arg Val Lys													
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128 Gly Lys Cys Thr Leu Met													
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181 Leu Arg Leu Leu Pro Ala Leu Leu Ile Leu Arg Ala Phe Lys Pro His
                                   25
184 Arg Lys Ile Arg Asp Tyr Arg Val Val Val Gly Thr Ala Gly Val
185 35
                               40
187 Gly Lys Ser Thr Leu Leu His Lys Trp Ala Ser Gly Asn Phe Arg His
190 Glu Tyr Leu Pro Thr Ile Glu Asn Thr Tyr Cys Gln Leu Leu Gly Cys
                       70
                                           75
193 Ser His Gly Val Leu Ser Leu His Ile Thr Asp Ser Lys Ser Gly Asp
196 Gly Asn Arg Ala Leu Gln Arg His Val Ile Ala Arg Gly His Ala Phe
              100
                                   105
199 Val Leu Val Tyr Ser Val Thr Lys Lys Glu Thr Leu Glu Glu Leu Lys
                              120
202 Ala Phe Tyr Glu Leu Ile Cys Lys Ile Lys Gly Asn Asn Leu His Lys
                          135
205 Phe Pro Ile Val Leu Val Gly Asn Lys. Ser Asp Asp Thr His Arg Glu
                       150
                                           155
208 Val Ala Leu Asn Asp Gly Ala Thr Cys Ala Met Glu Trp Asn Cys Ala
                   165
                                       170
211 Phe Met Glu Ile Ser Ala Lys Thr Asp Val Asn Val Gln Glu Leu Phe
               180
                                   185
214 His Met Leu Leu Asn Tyr Lys Lys Pro Thr Thr Gly Leu Gln Glu
                               200
217 Pro Glu Lys Lys Ser Gln Met Pro Asn Thr Thr Glu Lys Leu Leu Asp
218 210
                           215
220 Lys Cys Ile Ile Met
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Input Set : A:\05080~1.txt
Output Set: N:\CRF3\06212001\I873546.raw

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233	Val	Ile	Met	Val	Gly	Ser	Gly	Gly	Val	Gly	Lys	Ser	Ala	Leu	Thr	Leu
234				20	-		-	-	25	-	-			30		
	Gln	Phe	Met	Tvr	Asp	Glu	Phe	Val	Glu	Asp	Tyr	Glu	Pro	Thr	Lvs	Ala
237			35	-	-			40		•	-		45		•	
	•	Ser	Tyr	Arq	Lvs	Lys	Val	Val	Leu	Asp	Gly	Glu	Glu	Val	Gln	Ile
240		50	1	,	- 4		55				_	60				
	Asp	Ile	Leu	Asp	Thr	Ala	Gly	Gln	Glu	Asp	Tyr	Ala	Ala	Ile	Arq	Asp
243	_					70					75				3	80
		Tyr	Phe	Ara	Ser		Glu	Glv	Phe	Leu	Cvs	Val	Phe	Ser	Ile	Thr
246		- 1 -		5	85	1		1		90	- 4				95	
	Glu	Met	Glu	Ser	Phe	Ala	Ala	Thr	Ala	Asp	Phe	Ara	Glu	Gln	Ile	Leu
249				100					105	1		,		110		
	Arσ	Val	Lvs		Asp	Glu	Asn	Va l		Phe	Leu	Leu	Va1	,	Asn	Lvs
252	5		115		er			120					125	V -1		-1-
	Ser	Asp		Glu	Asp	Lvs	Ara		Va 1	Ser	Val	Glu		Ala	Lvs	Asn
255	001	130	200	014		2,5	135	0111	, 41	001	,	140	O_Lu		275	11011
	Ara	Ala	Glu	Gln	Trp	Asn		Asn	Tvr	Val	Glu		Ser	Δla	Lvs	Thr
	145	1114	014	0111		150	,	11011	-1-	, 41	155		001	1114	LID	160
		Ala	Asn	Val	Asp		Val	Phe	Phe	Asp		Met	Ara	Glu	Tle	
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	Ala	Arg	Lvs	Met		Asn	Ser	Lvs	Glu		Asn	Glv	Lvs	Lvs		Arα
264		9	270	180	014	···			185	270			275	190		
	T.v.s	Ser	Len		Lvs	Arσ	Tle			Arσ	Cvs	Cvs	Tle			
267	272	001	195	112.0	, .	5		200	014		0,10	0,10	205	Dea		
	<210)> SI		NO.	. 11			200					203			
		l> Li														
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)> SI				Jul	710111	,								
		Arg				T.e.11	Val	Val	T.011	Glv	Ser	Glv	Glv	Va 1	Glv	T.vc
277		arg	Olu	+ y +	5	пси	VUL	VUI	пса	10	DCI	Ory	Ory	vul	15	цуз
		Ala	T.211	Thr	_	Gln	Dho	Val	Gln		Tla	Dho	Va 1	Glu		ጥህጉ
280	DCI	пти	шси	20	VUL	0111	1110	V U.L.	25	OLY	110		VUI	30	פעם	1 y 1.
	Λen	Pro	Thr		Gĺn	λen	Sar	חיזנים		Luc	Gln.	Wal	Glu.		λen	Cvc
283	изр	FIO	35	116	Gru	лэр	Ser	40	Ary	цуз	GIII	Val	45	Val	изр	Cys
	Cln	Gln		Mot	Tou	C111	т10		7 cn	mhr	λla	C1 v		C1	Cln	Dho
286	GIII	50	Cys	Met	neu	GIU	55	Leu	мър	1111	нта	60	TIII	GIU	GIII	PHE
	Thr	Ala	Met	Δτα	Δen	T.eu		Mo+	T.ve	λen	G1v		C117	Dho	Δla	Lou
289		та	MEL	лту	vəh	70	тАт	Met	цуъ	USII	75	GTII	ату	FILE	мта	80
		Tyr	Ser	Tla	ጥኮድ		Gln	Ser	ጥኮኍ	Dhe		λen	Len	Gla	Δen	
292	*ul	TAT	Set	TTE	85	ата	GTII	SET	TIIT	90	USII	vəħ	пеп	GIII	95	ьeu
474					0.0					<i>5</i> U					22	

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294 295	Arg	Glu	Gln	Ile 100	Leu	Arg	Val	Lys	Asp 105	Thr	Glu	Asp	Val	Pro 110	Met	Ile
297 298	Leu	Val	Gly 115	Asn	Lys	Cys	Asp	Leu 120	Glu	Asp	Glu	Arg	Val 125	Val	Gly	Lys
300 301	Glu	Gln 130	Gly	Gln	Asn	Leu	Ala 135		Gln	Trp	Cys	Asn 140	Cys	Ala	Phe	Leu
303	Glu 145		Ser	Ala	Lys	Ser 150	Lys	Ile	Asn	Val	Asn 155	Glu	Ile	Phe	Tyr	Asp 160
		Val	Arg	Gln	Ile 165		Arg	Lys	Thr	Pro 170		Glu	Lys	Lys	Lys 175	
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					Lys	W- 1	Wa 1	375.1	Tou	C117	Cor	C1.,	C117	37 a T	C1	Lvza
320	1	_		-	5					10		_	_		15	_
322 323	Ser	Ala	Leu	Thr 20	Val	Gln	Phe	Val	Thr 25	Gly	Thr	Phe	Ile	Glu 30	Lys	Tyr
325 326	Asp	Pro	Thr 35	Ile	Glu	Asp	Phe	Tyr 40	Arg	Lys	Glu	Ile	Glu 45	Val	Asp	Ser
328 329	Ser	Pro 50	Ser	Val	Leu	Glu	Ile 55	Leu	Asp	Thr	Ala	Gly 60	Thr	Glu	Gln	Phe
331 332		Ser	Met	Arg	Asp	Leu 70	Tyr	Ile	Lys	Asn	Gly 75	Gln	Gly	Phe	Ile	Leu 80
334 335	Val	Tyr	Ser	Leu	Val 85	Asn	Gln	Gln	Ser	Phe 90	Gln	Asp	Ile	Lys	Pro 95	Met
337 338	Arg	Asp	Gln	Ile 100	Ile	Arg	Val	Lys	Arg 105	Tyr	Glu	Lys	Val	Pro 110	Val	Ile
340 341	Leu	Val	Gly 115	Asn	Lys	Val	Asp	Leu 120	Glu	Ser	Glu	Arg	Glu 125	Val	Ser	Ser
343 344	Ser	Glu 130	Gly	Arg	Ala	Leu	Ala 135		Glu	Trp	Gly	Cys 140	Pro	Phe	Met	Glu
346 347		Ser	Ala	Lys	Ser	Lys 150	Thr	Met	Val		Glu 155	Leu	Phe	Ala	Glu	Ile 160
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VERIFICATION SUMMARY

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L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:31 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1